Amendments to the Specification:

Please replace the first paragraph of page 7, lines 1 to 30 with following amended paragraph:

from about 0.01 mg/l to about 0.2 mg/l, most preferably about 0.05 mg/l. MET and NAA are also preferably used in the medium used to root transgenic seedlings regenerated from callus, in amounts similar to those described for the seedling culture medium. In a preferred embodiment of the callus-forming medium vitamin B_5, 2,4-D ((2,4-dichlorophenoxy)acetic acid, ~~MgCl~~ $MgCl_2$ and glucose are used, preferably about 0.05 mg/l to about 0.15 mg/l 2,4-D, about 0.4 mg/l to about 1.2 mg/l ~~MgCl~~ $MgCl_2$, and about 1% to about 5% glucose, most preferably about 0.1 mg/L 2,4-D, 0.8 mg/L ~~MgCl~~ $MgCl_2$ and 3% glucose. In an alternate preferred embodiment of the callus-forming medium myo-inositol, vitamin B_1, and dimethylallyl(amino)purine are used, a, preferably about 50 mg/l to about 150 mg/l myo-inositol, about 1 mg/l to about 10 mg/l vitamin B_1, and about 0.1 mg/l to about 7.5 mg/l dimethylallyl(amino)purine, most preferably about 100 mg/l myo-inositol, about 0.4 mg/l vitamin B_1 and about 5 mg/l dimethylallyl(amino)purine. The same media used for callus induction can also be used during selection with antibiotics -- for example with 300-400 mg/L cefotaxime or 15-30 mg/L kanamycin. The presence of high concentrations (preferably about 1900 mg/l to about 5700 mg/l, most preferably about 3800 mg/L) of nitrates ~~(preferably $NaNO_3$)~~ was crucial for the observed effectiveness of the differentiation medium. With the fibrous roots as explants, although the rate of callus-induction was lower compared with hypocotyl and cotyledon, a higher rate of transformation was achieved.

Please replace the first paragraph of page 8, lines 1 to 19 with following amended paragraph:

to a plant or plant tissue exposed to the *Agrobacterium* are well-known in the art and do not form part of the present invention. It is ~~**advantagious**~~ **<u>advantageous</u>** to use a so-called "disarmed" strain of *Agrobacterium* or Ti plasmid, that is, a strain or plasmid wherein the genes responsible for the formation of the tumor characteristic of the crown gall disease caused by wild-type ~~***Agrobacteruim***~~ ***<u>Agrobacterium</u>*** are removed or deactivated. Numerous examples of disarmed *Agrobacterium* strains are found in the literature (*e.g.*, pAL4404, pEHA101 and pEH 105 (Walkerpeach & Veltern, 1994)). It is further ~~**advantagious**~~ **<u>advantageous</u>** to use a so-called binary vector system, such as that described in U.S. Patent Nos. 4,940,838 and 5,464,763 (Schilperoort, et al.) and Hoekema et al., 1983. A binary vector system allows for manipulation in *E. coli* of the plasmid carrying the exogenous gene to be introduced into the plant, making the process of vector construction much easier to carry out.

Please replace the first paragraph of page 10, lines 1 to 21 with following amended paragraph:

Agrobacterium-mediated cotton transformation is considered in the art to be heavily variety-dependant. The Coker series of cotton varieties have been shown to be relatively easy to transform. However, DP 5412, ~~**Zhongmain**~~ **Zhongmian** 12 and many other varieties still have difficulties associated with transformation. The situation is the same for *G. barbadense* and other diploid species. Particle bombardment, DNA injection and infection of meristem tissue with *Agrobacterium* are some alternative methods, which can be used to transform, in theory, all the cotton varieties. The problems associated with these methods are: low efficiency of transformation and unstable/unreliable results. It is believed that the present method has broad applicability to transformation of cotton varieties, as it overcomes or minimizes several of the problems associated with previous work relating to cotton transformation (such as breakthrough of non-transformed callus, poor explant growth and low transformation rate, poor somatic regeneration) through the use of fibrous root explants.